The appropriate controls, i.e. all reactants and components with the pro-collagenase substituted by 200 microliters of Tris buffer, were carried out for each assay and the counts per minute were subtracted from the test results.

CLAIMS:

We claim:

1. A method for the preparation of an angiogenic factor of molecular weight of between 300 and 600, and having the ability to activate pro-collagenase, which comprises the steps of:

(1) growing tumour cells in vitro in an aqueous nutrient culture medium by a suspension culture procedure so that said factor is released into the culture medium,

(2) separating the grown cells from the culture medium to obtain an extract containing said angiogenic factor in admixture with proteinaceous materials,

(3) treating the extract from step (2) to remove proteinaceous materials from it, and

(4) recovering the angiogenic factor of molecular weight of between 300 and 600 from the extract remaining from step (3).

2. A method as claimed in claim 1 wherein the separated culture medium from step (2) is evaporated to dryness and the dried residue is extracted with a sufficient amount of a solvent which dissolves the low molecular weight angiogenic factor but not the proteinaceous material.

3. A method as claimed in claim 1 wherein the separated culture medium from step (2) is treated to render the proteinaceous material insoluble, and the insolubilised proteinaceous material is separated to leave an aqueous solution containing the low molecular weight angiogenic factor.

4. A method as claimed in claim 1 wherein the separated culture medium from step (2) is treated with a material which competes with the low molecular weight angiogenic factor for the proteinaceous materials and thereby releases the low molecular weight angiogenic factor from combination with the proteinaceous material, and then separating an aqueous fraction containing the low molecular weight angiogenic factor by dialysis and/or diafiltration.

5. A method as claimed in claim 1 wherein the low molecular weight angiogenic factor recovered by separation from the proteinaceous material is purified by adsorption on a basic adsorbent, and then eluted therefrom.

6. A method as claimed in claim 1 wherein the low molecular weight angiogenic factor recovered by separation from the proteinaceous material is purified by adsorption on an adsorbent comprising a fatty material on an inorganic substrate, and then eluted therefrom.

7. A method as claimed in claim 1 wherein the low molecular weight angiogenic factor recovered by separation from the proteinaceous material is purified by adsorption on an adsorbent comprising a collagen and then eluted therefrom.

8. A low molecular weight angiogenic factor which is anionic and water soluble, has the ability to activate procollagenase, has a molecular weight of between 300 and 600, binds to C.sub.18 -coated silica, is CAM-active, and stimulates mitosis in capillary endothelial cells, obtained by a process as claimed in claim 1.

9. A composition comprising a low molecular weight angiogenic factor as claimed in claim 8 in combination with heparin.